

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of)
)
Petition for Declaratory Ruling,)
Special Relief, and Institution)
of Rulemaking of)
)
America's Carriers Telecommunication)
Association ("ACTA"))

RM No. 8775

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Comments Of The
Commercial Internet eXchange Association

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Summary

The Commercial Internet eXchange Association ("CIX") recommends that the Commission dismiss the ACTA Petition. Regulation of Internet voice services at this time is premature. Such services do not represent a material threat or even a feasible substitute for traditional long-distance services as provided by ACTA members. More importantly, the Commission's resources are better spent deregulating switched telephony, as called for in the Telecommunications Act of 1996, than foisting new regulation on the vast array of Internet service providers.

Regulating the Internet as ACTA suggests will likely raise a number of troubling legal and policy issues. Regulation of the Internet would contravene Congress' stated policy objectives in the Telecommunications Act of 1996. These Congressional policy objectives are consistent with the Commission's long-standing deregulation of the customer premises equipment and enhanced services market. Further consideration of the ACTA Petition, by contrast, would send the Commission down the road of regulating those fully competitive markets for no significant public purpose.

ACTA's concern for new competitive entrants is understandable. Other incumbent providers will no doubt also look to the Commission to insulate them from the changes that a more competitive market will bring. However, to implement the new paradigm of competitive telecommunications markets, the Commission should resist efforts by incumbents to use the regulatory process as another barrier against alternative providers and new technologies. In this case, ACTA has failed to present evidence that Internet voice services threaten the Commission's telecommunications policy objectives in any material way and so regulation is simply not warranted.

For these reasons, the Commission should dismiss the ACTA Petition.

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Commercial Internet eXchange Association**

The Commercial Internet eXchange Association ("CIX"), by its attorneys, files these comments in response to the March 4, 1996 ACTA "Petition for Declaratory Ruling, Special Relief, and Institution of Rulemaking," RM No. 8775 ("ACTA Petition").

CIX is a non-profit organization with a membership of nearly 200 service providers offering access to the Internet for residential, business, and government customers in the United States and throughout the world. (A copy of the CIX membership list is attached hereto.)¹ As a non-profit organization for the industry, CIX works to facilitate global connectivity among commercial Internet service providers ("ISPs"), and to foster fair and open environments for Internet commercialization and interconnection. CIX provides a forum for the exchange of experiences and ideas to enhance the vitality of the ISP industry.

As described in more detail below, CIX believes it is far better for the Commission to continue to deregulate carriers offering switched telephony, consistent with the Commission's

¹ These comments represent the views of CIX as a trade organization and may not reflect the views of the individual members.

implementation of the Telecommunications Act of 1996, than to embark now on a program of regulating the Internet, as proposed by ACTA. Therefore, CIX urges the Commission to dismiss the ACTA Petition.

Introduction

ACTA asks the Commission to regulate the Internet generally by defining what are permissible and impermissible Internet communications and to "immediately stop" companies from "selling software for the specific purpose of allowing users of the Internet to make free or next to free, local, interexchange . . . and international telephone calls using the users' computer." ACTA Petition at i, 3.² ACTA asserts that this battery of new regulation is needed because "[t]he unfair competition created by the current unregulated bypass of the traditional means by which long distance services are sold could, if left unchecked, eventually create serious economic hardship on all existing participants in the long distance marketplace . . . such unregulated operations will rapidly grow and create a far more significant and difficult to control 'private' operational enclave of telecommunications providers and users." *Id.* at 4-5.

In fact, use of the Internet to transmit voice is, at best, in an experimental phase of development. One source indicates that there are only 20,000 regular Internet voice users in the United States with the necessary software, Internet access, and hardware (*i.e.*, headphones, microphones, computer, etc.).³ To do so, both users must generally coordinate a time to accept the other's message, with headphones on and computer and software running. The Internet voice

² Formally, ACTA requests for the Commission to: (a) declare its authority to regulate interstate and international telecommunications services provided over the Internet; (b) issue an order to all named and unnamed providers of Internet phone software and hardware, and (c) initiate a rulemaking proceeding to develop regulations governing the use of the Internet for telecommunications services.

³ "Threat: Small Firms Want FCC to Regulate New Product," Washington Post at F1 (March 8, 1996).

quality is variable, users can experience delays in transmission, and the various technologies are not interoperable. In this way, it is very unlike the pervasive public switched telephone network ("PSTN") which establishes a circuit between the two end-users, offering a high-quality service that permits simultaneous two-way transmission much like a face-to-face conversation. In contrast to Internet voice, the switched telecommunications network is simple to access and is virtually invisible to the users. Moreover, while the public switched telephone network links together approximately 94% of the United States population,⁴ Internet voice currently links not a single percent.⁵

Given the nascence of Internet voice services, CIX believes that the regulatory actions sought in the ACTA Petition are fundamentally at odds with the policies underpinning the Telecommunications Act of 1996 and with the Commission's own approach to regulating telecommunications and information services for the past decade. Instead of regulating the Internet, CIX recommends that the Commission continue to *deregulate* switched telephony so that ACTA can no longer be heard to complain of "unfair competition." The access charge reform proceeding, the universal service fund proceeding, the interconnection proceeding, and others will undoubtedly yield significant regulatory reform for the members of ACTA so that the "by-pass" concerns may never come to pass.

⁴ "FCC Releases New Telephone Subscribership Report, Low Income Households Less Likely to Have Telephone Service," FCC Public Notice, (released February 27, 1996); "Rules and Policies to Increase Subscribership and Usage of the Public Switched Network," Notice of Proposed Rulemaking, CC Dkt. No. 95-115, 10 FCC Rcd. 13003 n.2 (1995).

⁵ It is highly doubtful that Internet voice services operate as a substitute for either local or interexchange telecommunications services offered over the PSTN. Rather, it is households with low incomes, and not computer and Internet voice enthusiasts, that have been identified as non-subscribers to local and long-distance PSTN. *Cf., id.* at 13004, ¶ 2 (FCC requests comment on how newer technologies, such as the Internet, may contribute to the Commission's goal of universal service).

Discussion

I. Regulating the Internet Is Antithetical to the 1996 Act

ACTA argues that the Commission's authority over the Internet stems from the fact that the Internet is a finite resource requiring the Commission "to define the type of permissible communications" and, by corollary, to prohibit Internet services that are impermissible. ACTA Petition at 5, 9-10. While CIX has considerable knowledge of the Internet and its technical limitations, it cannot agree with ACTA's vague assertion that voice services significantly consume the Internet's resources. Regulation of Internet voice services will in no significant way improve the current technical and resource limits of the Internet. Moreover, recent Commission actions establishing new services have declined to set a strict definition of the scope of "permissible" communications.⁶ In place of regulations that define what is "permissible," the operators are allowed to meet consumer demand flexibly and without regulatory hindrance. A definition of the scope of permissible Internet services would be particularly inappropriate.⁷ Regardless, Congress has declared the federal government's view on regulation of the Internet and it is diametrically opposed to ACTA's position.

⁶ See Amendment of the Commission's Rules to Provide for Unlicensed NII/SUPERNet Operations in the 5 GHz Frequency Range, Notice of Proposed Rulemaking, ET Dkt. No. 96-102, FCC 96-193 (released May 6, 1996); In the Matter of Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use, First Report and Order and Second Notice of Proposed Rulemaking, ET Dkt. No. 94-32, 10 FCC Rcd. 4769 (1995).

⁷ The abundance of information resources found on the Internet owes much to the fact that users themselves define what are permissible communications based on mutual interests, commercial incentives, and the public interest in disseminating information. Usegroups, Web pages, chat groups, and hyperlinks to other areas of the Internet are all examples of how the Internet users themselves define the scope of information in highly effective and innovative manners. In this context, regulating the scope of permissible communications is simply unnecessary.

In passing the Telecommunications Act of 1996, Congress made explicit findings that the Internet is uniquely valuable *because* it has been left largely unfettered by government regulations. "The Internet and other interactive computer services have flourished, to the benefit of all Americans, with a minimum of government regulation." 47 U.S.C. § 230(a)(4); *see also id.* at § 230(a)(1) ("The rapidly developing array of Internet and other interactive computer services available to individual Americans represent an extraordinary advance in the ability of educational and informational resources to our citizens."). With these findings, Congress declared that "[i]t is the policy of the United States -- (1) to promote the continued development of the Internet and other interactive computer services . . . (2) to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, *unfettered by Federal or State regulation.*" *Id.* at § 230(b)(1) and (2) (emphasis added).

Even as Congress established the "Good Samaritan" defense provisions under the Online Family Empowerment provision and imposed Section 223 liability for knowingly sending indecent and obscene materials over the Internet, it kept the Commission out of regulation of the Internet. Importantly, while these statutory provisions attempt to strike a difficult balance -- protecting children from indecent and obscene material and protecting the Internet -- Congress did not vest the Commission with the authority to regulate. Rather, Section 223 of the Act limits the Commission's role to "describ[ing] measures which are reasonable, effective, and appropriate to restrict access to prohibited communications." 47 U.S.C. § 223(e)(6). Consistent with its policy and findings stated in Section 230, Congress made explicit in Section 223 that the Commission "shall have no enforcement authority over the failure to utilize" the measures that the Commission is to describe. *Id.* Further, Congress explained that, while it extended federal obscenity and indecency law to cover interactive computer services and the Internet, those provisions "shall not be construed to treat interactive computer services as common carriers or

telecommunications carriers." *Id.* While the provisions of the Cox-Wyden Amendment would also have put this issue to rest,⁸ Congress nonetheless adopted explicit findings and policies against Commission regulation of the Internet. ACTA's reference to the Commission's general jurisdiction under Title I of the Communications Act, as explained in United States v. Southwestern Cable Co., 392 U.S. 157 (1968), is inapposite -- Congress carefully circumscribed the limit of federal regulation of the Internet and determined that overarching regulation, especially by the Commission, is contrary to the public interest.⁹

ACTA asserts, however, that VocalTec, Inc. and other respondents must be regulated because they use the Internet in such a way as to be "telecommunications carriers." ACTA Petition at 6. This interpretation of the statutory scheme is plainly wrong. First, it would contradict Congressional policy objectives, as discussed above. In addition, VocalTec sells software, it does not sell "telecommunications" because it is not engaged in the common carrier business of "transmission . . . of information of the user's choosing." 47 U.S.C. § 153(48). For the same reason, the software offered by VocalTec and the other respondents cannot be deemed a "telecommunications service."¹⁰ While ACTA requests that the Commission apply the full ambit of common carrier regulations on VocalTec and others, Congress expressly limited

⁸ H.R. 1555, § 230(d), 104th Cong., 1st Sess. (1995).

⁹ In Southwestern Cable, the Court upheld the Commission's authority to regulate cable television in furtherance of the general policy goals of the Communications Act, in the absence of Congressional directive otherwise. Southwestern Cable, 392 U.S. at 177-78. Unlike Southwestern Cable, Congress here has provided unmistakable direction for the Commission *not* to regulate the Internet. *See, AT&T v. FCC*, 487 F.2d 864, 875-76 (2d Cir. 1973) (Court distinguishes Southwestern Cable decision where FCC action would result in "consequent frustration of the statutory purpose").

¹⁰ The definition of "telecommunications service" is carefully limited to include only *direct* offerings of telecommunications services "to the public, or to such classes of the public as to be effectively available *directly* to the public." 47 U.S.C. § 153(51). Any argument that VocalTec provides telecommunications indirectly to the public fails to address this statutory limitation.

common carrier regulation only to telecommunications carriers "engaged in providing telecommunications services." 47 U.S.C. § 153(49).

II. The ACTA Petition is Contrary to the Commission's Policy of Deregulation of CPE and Enhanced Services

The software provided by VocalTec and the other respondents is used by operators of privately owned computer terminal equipment on their own premises to interact with other computer users. As discussed above, it is not a "telecommunications service" and so not subject to Title II regulation. Even aside from ACTA's failure to reconcile its request with the Telecommunications Act of 1996, the ACTA Petition raises troubling policy concerns because the product offered by VocalTec and the other named respondents could only be described as customer premises equipment ("CPE") or an adjunct to CPE.

As such, the ACTA Petition conflicts with almost three decades of Commission policy to deregulate the CPE market.¹¹ As explained in Computer II,

Beginning with our Carterfone decision this Commission has embarked on a conscious policy of promoting competition in the terminal equipment market. As a result of this policy the terminal equipment market is subject to an increasing amount of competition as new and innovative types of CPE are constantly introduced into the marketplace by equipment vendors. We have repeatedly found that competition in the equipment market has stimulated innovation on the part of both independent suppliers and telephone companies, thereby affording the public a wider range of terminal choices at lower costs. . . . Moreover, this policy has afforded consumers more options to obtaining equipment that best suits their communication or information processing needs.¹²

¹¹ Carter v. AT&T Co., 13 F.C.C.2d 420, recon. denied, 14 F.C.C.2d 571 (1968).

¹² Computer II Final Decision, 77 F.C.C. 2d 384, 387 (1980) (subsequent history omitted).

If the Commission were now to regulate Internet software providers as common carriers, this action would have significant negative impact on telecommunications and information CPE markets. While ACTA fails to offer any evidence as to why the deregulated CPE should now be so disrupted, the Commission must consider very carefully the implications that regulation of software providers would have on these presently deregulated markets.

Similarly, ACTA calls on the Commission to initiate a broad rulemaking to establish regulatory control over the Internet, ACTA Petition at 9-10, in apparent conflict with the Commission's long-standing policy exempting enhanced services from common carrier regulation.¹³ While it has failed to recognize the conflict,¹⁴ the enhanced services exemption has permitted a multitude of innovative companies to add value to basic communications services as the market demands it. Like regulation of CPE, imposition of common carrier regulation on the deregulated Internet enhanced service providers will undoubtedly dampen innovation and services on the Internet, as well as other enhanced service markets.

We also note that ACTA's proposal to regulate Internet "information service" providers would apparently conflict with the Telecommunications Act of 1996, which limits Title II

¹³ 47 C.F.R. § 64.702(a) ("Enhanced services are not regulated under Title II of the [Communications] Act."). It would seem self-evident that many services provided on the Internet fall squarely on the side of "enhanced" under the Commission's precedent: "enhanced service combines basic service with computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber's transmitted information, or provide the subscriber additional, different, or restructured information, or involve subscriber interaction with stored information." Computer II, 77 F.C.C. 2d at 387.

¹⁴ ACTA apparently assumes that, because it complains about voice services on the Internet, such services must be deemed "basic" or "telecommunications" services. However, the Commission dismissed such an oversimplified view of the basic/enhanced dichotomy in Computer II. Computer II Final Decision, 77 F.C.C.2d at 424-28 (FCC rejects proposal to distinguish between "communications" and "data processing"). In fact, one concrete example used by courts as an enhanced service is itself a voice service -- voice mail. See California v. FCC, 39 F.3d 919, 925 (9th Cir. 1994), cert. denied, 115 S.Ct. 1427 (1995).

common carrier regulation to a telecommunications carrier "only to the extent that it is engaged in providing telecommunications services." 47 U.S.C. § 153(49). Compare *id.* at § 153(41) ("information service" definition) with *id.* at § 153 (51) and (48) ("telecommunications service" and "telecommunications" definition).¹⁵

However, ACTA provides no concrete policy rationale or factual basis for the Commission to overhaul its settled policy or to test the jurisdictional limits of the 1996 Act. Instead, ACTA offers speculation that the provision of Internet voice will (someday) threaten the revenue base of traditional switched, basic communications operators. While the Commission's role is not to ensure the financial success of its regulatees, common carrier revenues seem to be under no significant or immediate threat. See "Telecommunications Industry Reports \$183.9 Billion in Revenue for 1994," FCC Public Notice (released February 5, 1996) (FCC's TRS Fund Worksheet Data report showed that U.S. local and interexchange common carriers earned \$183.9 billion in 1994, up by 7.6% from 1993). If ACTA's day comes, the Commission will be better able to respond effectively with a factual context, rather than ACTA's conjecture, to rely on. ACTA also baldly asserts that tariffing requirements on Internet service providers will help to curb activities such as "gambling, obscenity, prostitution, drug traffic, and other illegal acts." ACTA Petition at 10. Aside from the fact these evils are already addressed in other state and federal laws, there is a tenuous nexus, at best, between a rule forcing thousands of tariff filings at 1919 M Street and improving the nation's war on illegal drugs.¹⁶

¹⁵ Alternatively, the Telecommunications Act of 1996 provides the Commission with ample authority to forbear from common carrier regulation in instances such as these where additional regulation is unnecessary and forbearance furthers the public interest by allowing the plethora of Internet services enjoyed by millions of Americans to grow. 47 U.S.C. § 160(a).

¹⁶ ACTA also claims that regulation of the Internet is necessary because of the "Commission's duty to effectively promote universal service." ACTA Petition at 9. However, the Commission is only *obligated* to seek universal service contribution from "telecommunications carriers," 47 U.S.C. § 254(d), and not "information service" providers.

(Footnote continued to next page)

III. Deregulation of the Public Switched Network, and Not New Regulation of the Internet, Is What is Needed

ACTA's concern about the threat of bypass and its request for the Commission to protect those "traditional" providers of local and long distance communications are understandable. Recent Commission policies have broken down traditionally protected industries,¹⁷ and the Telecommunications Act of 1996 requires all participants -- both industry and the Commission -- to take quantum leaps toward a market where many providers and technologies compete for the customer's business. As Commissioner Ness recently noted, "[t]he new law deliberately blurs lines between formerly discrete sectors of the telecommunications industry. Bell Atlantic may become your long distance company, or your video service provider. MCI or AT&T may become your local telephone company, or your source for wireless services. Cox or Comcast may offer you broadband Internet access, or wireless local loop."¹⁸ Unfortunately, the ACTA Petition is an attempt by one industry segment, resellers of long-distance services, to force the Commission to reflex against new technologies and new competition like the Internet. Further consideration of the ACTA Petition will only provide incentive for more incumbent providers to use the Commission's processes to slow the onslaught of new competition.

Instead, the Commission should give ACTA members a chance to compete in new markets and to offer more innovative services, keeping regulation to a minimum. These new

(Footnote continued from previous page)

Moreover, to the extent that ISPs lease private lines of long-distance carriers, Internet traffic supports the revenue base for universal service funding.

¹⁷ These policies include the mandatory resale of common carrier services, expanded interconnection, and the promotion of broadband wireless telephony.

¹⁸ Remarks of Commissioner Susan Ness, "The New Telecommunications Marketplace: Radical Changes and Golden Opportunities," Public Policy Forum Series, The Wharton School of the University of Pennsylvania (February 22, 1996).

opportunities appear to be just on the horizon. For example, the wholesale resale provisions of the Telecommunications Act of 1996 should give incentive to ACTA members to enter the local exchange business.¹⁹ Additionally, the interconnection provisions will permit ACTA members to purchase local exchange network elements at cost.²⁰ The Commission's initial interconnection order is expected in August of this year.²¹ Still more Commission decisions in the near future are expected to lower the costs of doing business for interexchange carriers. The universal service proceeding already underway seeks to identify and eliminate implicit subsidies and to spread the costs of universal service across all telecommunications carriers, not just interexchange carriers.²² Perhaps most important, the Commission's promised access charge reform proceeding will undoubtedly provide a more cost-based solution to interexchange access to the local loop, ending the current and enormous implicit subsidies borne by interexchange carriers and their customers. Finally, the Commission has recently refocused its efforts to break down the prohibitive accounting rates charged by foreign carriers,²³ which have artificially raised the price and suppressed the demand for international long-distance.²⁴

¹⁹ 47 U.S.C. § 251(c)(4); Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Notice of Proposed Rulemaking, CC Dkt. 96-98, FCC 96-198 (released April 19, 1996).

²⁰ 47 U.S.C. §§ 251(c)(3) and 252(d)(1)(A).

²¹ Draft Implementation Schedule for the Telecommunications Act of 1996 at 1 (released March 27, 1996).

²² Federal-State Joint Board on Universal Service, Notice of Proposed Rulemaking, CC Dkt. No. 96-45, FCC 96-93 (released March 8, 1996).

²³ See, Policy Statement on International Accounting Rate Reform, FCC Public Notice, FCC 96-37 (released January 31, 1996) ("International Policy Statement").

²⁴ To the extent that Internet voice is a cost effective means of avoiding unreasonably high foreign accounting rates, it advances the Commission's stated public interest in encouraging

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Once implemented these deregulatory measures will provide ACTA members adequate opportunities to compete across telecommunications industries without the need for regulation of the Internet.

Conclusion

For the foregoing reasons, CIX urges the Commission to dismiss the ACTA Petition. In addition, the Commission should continue to refrain from regulating the Internet, as its dynamic and world-wide resources have flourished in the absence of regulatory constraints.

Respectfully submitted,

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foreign carriers and governments to reduce their charges to cost-based levels. International Policy Statement, at ¶ 21-22 ("services that are provided in a way which differs from the traditional correspondent IMTS can serve the public interest by providing increased competition in U.S. and foreign markets. . . . By increasing competitive pressures in foreign markets, these services place significant downward pressure on foreign IMTS collection rates.").

WHO MAY JOIN THE CIX?

Membership in the Commercial Internet eXchange is open to organizations which offer TCP/IP or OSI public data internetworking services to the general public in multiple geographic regions. Organizations or individuals seeking Internet connections are urged to contact CIX members directly for further information. Qualified public data Internet service providers interested in exchanging commercial traffic with other providers on a peer basis are most welcome and encouraged to become CIX Association members.

WHAT NETWORKS ARE MEMBERS OF CIX?

Last Updated: May 8, 1996

- o 2020Net - Eastern U.S.
- o 3C Europe Ltd. - United Kingdom
- o 3 Web Corp - Japan
- o ACSI - Southern U.S.
- o Advantis(IBM Global Network) - National U.S.
- o Agate Internet Services - Bangor, Maine
- o American Network - New York
- o ANS CO+RE Systems, Inc. - National U.S.
- o Apex Global Info Systems(AGIS) - National U.S.
- o ASahi Net - Japan
- o Ashton Communications - Mexico & Southwest U.S.
- o Asociados Espada C.A. - Venezuela
- o ATMNet, LLC - California and Florida
- o Aurora.Net - Canada
- o a2i Communications - San Francisco Bay Area
- o alpha-web - Japan
- o BARRNet - Northern California
- o BEKKOAME INTERNET INC. - Japan
- o BTnet - United Kingdom
- o Bull HN Information Systems Inc. - Massachusetts
- o Cable Internet - United Kingdom
- o Cable Online Ltd. - United Kingdom
- o Cable&Wireless NetWorth - National U.S.
- o Capcon Library Network - Virginia, Maryland
- o CentNet - Boston Area
- o CERFnet - West Coast U.S.
- o Commonwealth Telephone Company - Pennsylvania
- o Compuserve - National U.S. & International
- o Connect.Com.au - Australia
- o CR Internet - Japan
- o CRL - National U.S.
- o Crocker Communications - Massachusetts
- o Crossroads Communications - National U.S.
- o CTS Network Services - California
- o Cybergate - Florida, Southeast U.S.
- o Dart Net Ltd. - United Kingdom
- o Datalytics - Midwest U.S.
- o DataNet - Hungary
- o Data Research Associates - National U.S., Canada, Far East, Europe and South America
- o DataXchange - Florida
- o Dayton Network Access Company - Ohio
- o Demon Internet - United Kingdom
- o Destek Group, Inc. - Northern New England
- o Digital Express Group - East Coast U.S.
- o DirectNet Corp. - National U.S.
- o EasyNet Group, Plc - United Kingdom
- o EMI Communications - National U.S.
- o Emirates Internet - United Arab Emirates
- o EskimoNet - Western Washington State
- o EUnet - Europe
- o EuroNet Internet - Europe
- o Exodus Communications - California
- o EZnet - New York
- o FIBRCOM - Southern U.S. and Mexico
- o Fibernet - National U.S.
- o Fujitsu - Japan
- o Globalcenter.net - National U.S. and Canada
- o GridNet International - Southeastern U.S.
- o Hewlett Packard Labs - United Kingdom
- o HiNet - Taiwan
- o Hitachi, Ltd. - Japan
- o HLC-Internet - National U.S.
- o Hong Kong Supernet - Hong Kong
- o HookupNet - Canada
- o I-2000 - Northeastern U.S.
- o ICon International - National U.S.
- o Iij - Japan
- o I-Net Technologies - Korea
- o InfoTek - South Africa
- o INS Info Services - Iowa/Midwest
- o INSINC - Canada
- o InterCon - Virginia
- o Internet Africa - South Africa
- o Internet Atlanta, Inc. - Southeast U.S.
- o Internet Corporativo - Mexico
- o Internet Exchange Europe - Netherlands
- o InternetKDD - Japan
- o The Internet Mainstreet - San Francisco Bay Area, CA
- o Internet Media Network, Inc. - Southern CA.
- o Internet Oklahoma - Oklahoma
- o Internet Public Access Corp. - San Jose, California
- o Interpath - Southeast U.S.
- o InterServe Communication - Hong Kong
- o ITnet - Italy
- o IUnet - Italy
- o JC Information Systems - California
- o JTNET - Japan
- o KorNet - Korea
- o LDS-iAmerica - National U.S.

- o Lincoln Telephone & Telegraph - Nebraska
- o Logical Net - New York
- o LYNX - Bermuda
- o MCI - National U.S. & International
- o MISNET - Kentucky
- o NEARNET - New England
- o NEC - Japan
- o Net 99 - National U.S. and International
- o NETCOM - National U.S.
- o NetDirect Internet - United Kingdom
- o NetNet, Inc. - Wisconsin
- o NetVision - Israel
- o Netway Communications Inc. - California
- o New York Net - New York
- o Nissan Information Network Co., Ltd. - Japan
- o Nordic Carriers - Scandinavia
- o NorthWestNet - Northwest U.S.
- o Novia Internetworking - Nebraska
- o OCTACON - United Kingdom
- o Open Business Systems - Illinois
- o Pacific Bell Internet - California
- o PearlVision (PEARL-NET) - Japan
- o Pilot Network Services - San Francisco Bay Area
- o Planet Online Limited - United Kingdom
- o PSINet - National U.S. and Japan
- o Qwest Communications - Western U.S.
- o RACSAnet - Costa Rica
- o RGNet - Oregon/California
- o RIMNET - Japan
- o SARENET - Spain
- o Singapore Telecom - Singapore
- o Sovam Teleport - Russia
- o SpinNet (AT&T Jens) - Japan
- o SprintLink - National U.S.
- o Sun Microsystems Inc. - National U.S.
- o SURAnet - Southeast U.S.
- o Synergy Communications - National U.S.
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- o ThoughtPort - National U.S.
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- o TWICS - Japan
- o U-NET - United Kingdom
- o Unipalm PIPEX - United Kingdom
- o US Cyber - National U.S.
- o USIT - Tennessee
- o UUNET Technologies, Inc. - National U.S.
- o Vision Network Limited - Hong Kong
- o West Publishing Corporation - Minnesota
- o WW Comunicaciones - Guatemala, Honduras, and
El Salvador

Additional networks are joining each month.

Certificate of Service

I hereby certify that a copy of the foregoing Comments of The Commercial Internet eXchange Association was mailed, postage prepaid, this 8th day of May, 1996 to:

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